

AMENDMENTS TO THE CLAIMS

1-92. (Cancelled)

93. (Currently amended) A composition comprising:

a mixture comprising a first component that comprises an-unprocessed adipose tissue comprising intact, non-disaggregated tissue fragments obtained from a subject mixed with a second component comprising a concentrated population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells, wherein said concentrated population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells is obtained from said subject, and wherein the frequency of disaggregated adipose-derived stem cells in said second component is at least 0.1% of the nucleated cells in said second component.

94. (Previously presented) The composition of Claim 93, wherein the amount of adipose-derived stem cells in said first component is less than the amount of adipose-derived stem cells in said second component.

95. (Cancelled)

96. (Currently amended) The composition of Claim 93, wherein the ~~amount~~ frequency of disaggregated adipose-derived stem cells in said second component is between about 2% and about 12% ~~of the total population of cells.~~

97. (Previously presented) The composition of Claim 93, wherein the volume of the first component is at least 25% greater than the volume of the second component.

98. (Previously presented) The composition of Claim 93, wherein the volume of the first component is at least 50% greater than the volume of the second component.

99. (Previously presented) The composition of Claim 93, wherein the volume of the first component is at least 100% greater than the volume of the second component.

100. (Previously presented) The composition of Claim 93, wherein the volume of the first component is at least 150% greater than the volume of the second component.

101. (Previously presented) The composition of Claim 93, wherein said second component is cryopreserved material.

102. (Previously presented) The composition of Claim 93, wherein said first component is cryopreserved material.

103. (Previously presented) The composition of Claim 93, wherein said second component is substantially free from mature adipocytes and connective tissue.

104. (Currently amended) A composition obtained by a process comprising:

providing unprocessed adipose tissue from a subject, wherein said unprocessed adipose tissue has not undergone a disaggregation process to remove cells from said adipose tissue; and wherein said unprocessed adipose tissue comprises intact, non-disaggregated tissue fragments; and

mixing said adipose tissue with a concentrated population of disaggregated adipose-derived cells ~~population~~ that comprises disaggregated adipose-derived stem cells, wherein said concentrated population of disaggregated adipose-derived cells ~~population~~ that comprises adipose-derived stem cells is obtained from said subject, and wherein the frequency of disaggregated adipose-derived stem cells in said concentrated population of disaggregated adipose-derived cells is at least 0.1% of the nucleated cell population.

105. (Currently amended) The composition of Claim 104, wherein the amount of adipose-derived stem cells in said unprocessed adipose tissue is less than the amount of disaggregated adipose-derived stem cells in said concentrated ~~cell~~ population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells.

106. (Cancelled)

107. (Currently amended) The composition of Claim 104, wherein the ~~amount~~ frequency of disaggregated adipose-derived stem cells in said concentrated ~~cell~~ population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells is between about 2% and about 12% ~~of the total population of cells.~~

108. (Currently amended) The composition of Claim 104, wherein the volume of the adipose tissue is at least 25% greater than the volume of the concentrated ~~cell~~ population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells.

109. (Currently amended) The composition of Claim 104, wherein the volume of the adipose tissue is at least 50% greater than the volume of the concentrated ~~cell~~ population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells.

110. (Currently amended) The composition of Claim 104, wherein the volume of the adipose tissue is at least 100% greater than the volume of the concentrated ~~cell~~-population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells.

111. (Currently amended) The composition of Claim 104, wherein the volume of the adipose tissue is at least 150% greater than the volume of the concentrated ~~cell~~-population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells.

112. (Currently amended) The composition of Claim 104, wherein said concentrated ~~cell~~-population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells is cryopreserved material.

113. (Previously presented) The composition of Claim 104, wherein said unprocessed adipose tissue is cryopreserved material.

114. (Currently amended) The composition of Claim 104, wherein said concentrated ~~cell~~-population of disaggregated adipose-derived cells that comprises adipose-derived stem cells is substantially free from mature adipocytes and connective tissue.

115. (Currently amended) A composition comprising a mixture of a concentrated population disaggregated adipose-derived of cells that comprises disaggregated adipose-derived stem cells and unprocessed adipose tissue comprising intact, non disaggregated tissue fragments of a subject obtained by a process comprising:

- removing a first portion of adipose tissue that comprises a cell population that comprises adipose-derived stem cells from a subject;

- introducing said first portion of adipose tissue that comprises said cell population that comprises adipose-derived stem cells into a self-contained adipose-derived stem cell processing unit, wherein said self-contained adipose-derived stem cell processing unit comprises:

- a tissue collection container that is configured to receive unprocessed adipose tissue that is removed from a subject, wherein said tissue collection container is defined by a closed system;

- a first filter that is disposed within said tissue collection container, which wherein said first filter is configured to retain a first component of said unprocessed adipose tissue and pass a second component of said unprocessed

adipose tissue, such that said first filter separates said first component from said second component, and wherein said first component comprises a cell population that comprises adipose-derived stem cells and said second component comprises adipose tissue and pass lipid, blood, mature adipocytes and saline;

a cell collection container, which is configured to receive and concentrate said first component comprising a cell population of cells that comprises adipose-derived stem cells from said tissue collection container, wherein said cell collection container is within said closed system; and

a conduit configured to allow passage of said first component comprising a cell population comprising adipose-derived stem cells from said tissue collection container to said cell collection container while maintaining a closed system;

a cell concentrator disposed within said cell collection container that is configured to facilitate the concentration of said first component comprising a cell population that comprises adipose-derived stem cells, wherein said cell concentrator comprises a centrifuge or a spinning membrane filter; and

an outlet configured to allow the aseptic removal of said concentrated population of cells that comprises adipose-derived stem cells

separating and concentrating said cell population that comprises adipose-derived stem cells from said first portion of adipose tissue within said self-contained adipose-derived stem cell processing unit while maintaining said closed pathway to obtain a concentrated cell population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells;

mixing said concentrated cell population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells with a second portion of unprocessed adipose tissue comprising intact, non disaggregated tissue fragments from said subject, so as to obtain a mixture of the unprocessed adipose tissue and the concentrated cell population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells, wherein the frequency of disaggregated

adipose-derived stem cells in said concentrated population of disaggregated adipose-derived cells is at least 0.1% of the nucleated cells.

116. (Currently amended) The composition of Claim 115, wherein the amount of adipose-derived stem cells in said second portion of unprocessed adipose tissue obtained from said subject is less than the amount of disaggregated adipose-derived stem cells in said concentrated cell-population of adipose-derived cells that comprises disaggregated adipose-derived stem cells.

117. (Cancelled)

118. (Currently amended) The composition of Claim 115, wherein the ~~amount~~ frequency of disaggregated adipose-derived stem cells in said concentrated cell-population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells is between about 2% and about 12% ~~of the total population of cells~~.

119. (Currently amended) The composition of Claim 115, wherein the volume of the second portion of adipose tissue obtained from said subject is at least 25% greater than the volume of the concentrated ~~cell-population~~ of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells.

120. (Currently amended) The composition of Claim 115, wherein the volume of the second portion of adipose tissue obtained from said subject is at least 50% greater than the volume of the concentrated ~~cell-population~~ of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells.

121. (Currently amended) The composition of Claim 115, wherein the volume of the second portion of adipose tissue obtained from said subject is at least 100% greater than the volume of the concentrated ~~cell-population~~ disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells.

122. (Currently amended) The composition of Claim 115, wherein the volume of the second portion of adipose tissue obtained from said subject is at least 150% greater than the volume of the concentrated ~~cell-population~~ of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells.

123. (Currently amended) The composition of Claim 115, wherein said concentrated cell-population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells is cryopreserved material.

124. (Previously presented) The composition of Claim 115, wherein said second portion of adipose tissue obtained from said subject is cryopreserved material.

125. (Currently amended) The composition of Claim 115, wherein said concentrated cell-population of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells is substantially free from mature adipocytes and connective tissue.

126. (New) A composition comprising:

a first component that comprises intact adipose tissue fragments obtained from a subject; mixed with a second component that comprises a suspension of disaggregated adipose-derived cells that comprises disaggregated adipose-derived stem cells, wherein the frequency of disaggregated adipose-derived stem cells in said second component is at least 0.1% of the nucleated cells.

127. (New) The composition of Claim 126, wherein the frequency of disaggregated adipose-derived stem cells that comprises disaggregated adipose-derived stem cells in said second component is between about 2% and about 12%.